# 60 Watts LPT60 Series

Total Power: 60-80 Watts Input Voltage: 85-264 VAC

120-300 VDC

# of Outputs: Triple



# **Special Features**

- Universal input
- 3" x 5" footprint
- Remote sense on main output
- · Built-in EMI filter
- Low output ripple
- Adjustable main output
- Overvoltage protection
- · Overload protection
- 110 KHz switching frequency
- LPX60 enclosure kit available

## **Environmental**

Operating temperature: 0° to 50°C ambient derate each output at 2.5% per degree from 50° to 70°C

Electromagnetic susceptibility: designed to meet IEC 801, -2, -3, -4, -5, -6, Level 3

ile 801, -2, -3, -4, -3, -0, level 3

Humidity: Operating; non-condensing 5% to 95%

Vibration: Three orthogonal axes, sweep at 1 oct/min, 5 min. dwell at four major resonances 0.75G peak 5 Hz to 500 Hz, operational

Storage temperature: -40° to 85°C
Temperature coefficient: ±.04% per °C

MTBF demonstrated: >550,000 hours at full load

and 25°C ambient conditions

## **Electrical Specs**

Input

Input range 85-264 VAC 120-300 VDC Frequency 47-440 Hz

Inrush current <18 A peak @ 115 VAC;

<36 A peak @ 230 VAC, cold start @ 25°C

Input current 1.5 A max. (RMS) @ 115 VAC Efficiency 70% typical at full load (60% for

LPT61)

EMI filter FCC Class B conducted

CISPR 22 Class B conducted EN55022 Class B conducted VDE 0878 PT3 Class B conducted

Safety ground leakage

current <0.5 mA @ 50/60 Hz, 264 VAC input

Output

Maximum power 60 W for convection (LPT61, 35 W);

80 W with 30 CFM forced air (LPT61,

55 W)

Adjustment range -5, +10% minimum Cross regulation ±2% on output 1;

±5% on outputs 2,3

Hold-up time 20 ms @ 60 W load, 115 VAC nominal

line

Overload protection Short circuit protection on all

outputs. Case overload protected @

110-145%

above peak rating

Overvoltage protection 5.7-6.7 VDC on main output

LPT61: 3.6 to 4.6 VDC

Remote sense Compensates for 0.5 V lead drop min.

Will operate without remote sense connected. Reverse connection

protected.

# Safety

**VDE** 0805/EN60950 (IEC950) 11774-3336-1255 (LC #86665)

 UL
 UL1950
 E132002

 CSA
 CSA 22.2-234 Level 3
 LR53982C

 NEMKO
 EN 60950/EMKO-TUE
 P95100123

(74-sec) 203

**CB** Certificate and report 1518, 1519, 1520

CE Mark (LVD)

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ASIA



# **Ordering Information**

Model Number	Output Voltage	Minimum Load	Maximum Load with Convection Cooling	Maximum Load with 30 CFM Forced Air	Peak Load1	Regulation2	Ripple P/P (PARD)3
LPT61	+3.3 V	0.7A	5 A	8.5 A	9.5 A	±2%	50mV
	+5 V	0 A	2.5 A	3.0 A	3.3 A	±2%	50mV
	+12 V	0 A	0.5 A	1.0 A	1 A	±5%	120mV
LPT62	+5 V	0.7 A	7 A	8 A	10 A	±2%	50 mV
	+12 V	0.3 A	3 A	3.5 A	6 A	±5%	120 mV
	-12 V	0 A	0.7 A	1 A	1.5 A	±5%	120 mV
LPT63	+5 V	0.7 A	7 A	8 A	10 A	±2%	50 mV
	+15 V	0.3 A	2.8 A	3.3 A	4 A	±5%	150 mV
	-15 V	0 A	0.7 A	1 A	1.5 A	±5%	150 mV
LPT64	+5 V	0.7 A	7 A	8 A	10 A	±2%	50 mV
	+12 V	0.3 A	3 A	3.5 A	6 A	±5%	120 mV
	-5 V	0 A	0.7 A	1 A	1.5 A	±5%	50 mV
LPT65	+5 V	0.7 A	7 A	8 A	10 A	±2%	50 mV
	+24 V	0.1 A	1.5 A	2.0 A	3 A	±7%	240 mV
	+12 V	0 A	0.7 A	1 A	1.5 A	±5%	120 mV

- 1. Peak current lasting <30 seconds with a maximum 10% duty cycle.
- 2. At 25°C including initial tolerance, line voltage, load currents and output voltages adjusted to factory settings.
- 3. Peak-to-peak with 20 MHz bandwidth and 10 µF in parallel with a 0.1 µF capacitor at rated line voltage and load ranges.
- 4. Minimum Loads are required.

# **Pin Assignments**

Connector	LPT61	LPT62	LPT63	LPT64	LPT65
SK1-1 SK1-3	Neutral Line	Neutral Line	Neutral Line	Neutral Line	Neutral Line
SK2-1	5 V	+12 V	+15 V	+12 V	+24V
SK2-2	3.3 V	+5 V	+5 V	+5 V	+5 V
SK2-3	3.3 V	+5 V	+5 V	+5 V	+5 V
SK2-4	Commor	Common	Common	Common	Common
SK2-5	Commor	n Common	Common	Common	Common
SK2-6	+12V	-12 V	-15 V	-5 V	+12 V
SK201-1	+Sense	+Sense	+Sense	+Sense	+Sense
SK201-2	-Sense	-Sense	-Sense	-Sense	-Sense

### **Mating Connectors**

AC Input:	Molex 09-50-8031 (USA)
	09-91-0300 (UK)
	PINS: 08-58-0111
DC Outputs:	Molex 09-50-8061 (USA)

09-91-0600 (UK) PINS: 08-58-0111

Remote Sense: Molex 22-01-2025 PINS: 08-50-0114

Astec Connector Kit #70-841-006, includes all of the above.

## Notes:

- 1. Specifications subject to change without notice.
- 2. All dimensions in inches (mm), tolerance is  $\pm .02$ ".
- 3. Mounting holes M1 and M2 should be grounded for
- 4. Mounting hole M1 is safety ground connection.
- 5. Specifications are for convection rating at factory settings at 115 VAC input, 25°C unless otherwise stated.
- 6. Warranty: 1 year
- 7. Weight: 0.75 lb. / 0.34 kg

### **Power Derating Curve** 80W Output Power (Watts) 40W 30W Cooling 20W 0W 0°C 10°C 20°C 30°C 40°C 50°C 60°C 70°C TA – Ambient Temperature – °C



